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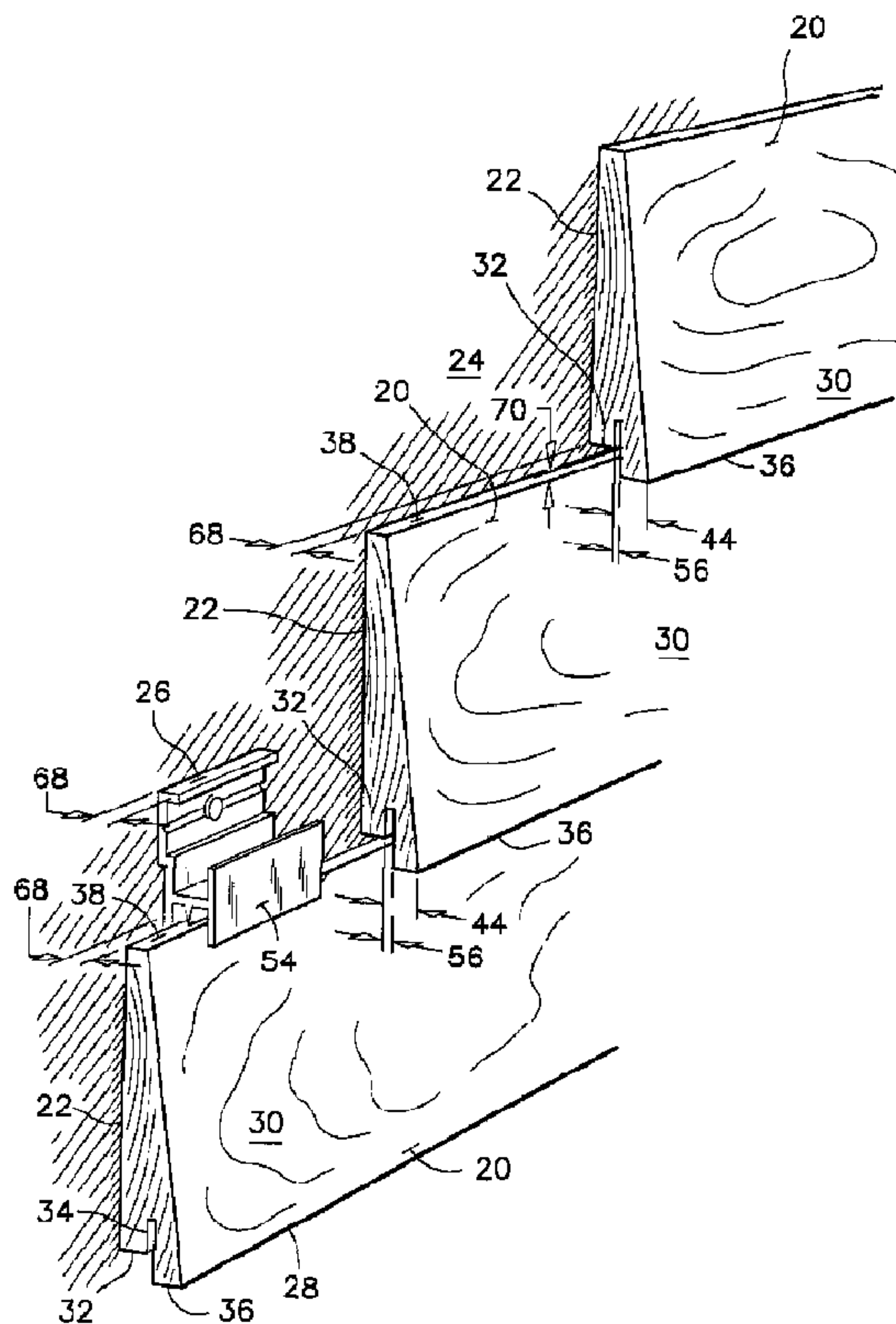
(71) **Demandeur/Applicant:**  
C.B.H. INVESTMENT LTD., CA

(72) **Inventeur/Inventor:**  
HUSLER, BALTHASAR, CH

(74) **Agent:** THERIAULT, MARIO D., P. ENG.

(54) **Titre : SYSTEME DE PAREMENT EN BOIS DE TYPE CLIN A L'ANCIENNE AVEC ESPACES DE VENTILATION**

(54) **Title: OLD-FASHION CLAPBOARD-LIKE WOOD SIDING SYSTEM WITH VENTILATION GAPS**



(57) **Abrégé/Abstract:**

The wood siding system has air circulation gaps between overlapping siding boards and between the siding boards and a supporting wall. The wood siding system has the appearance of old-fashioned clapboards; a limited flexibility that closely imitates a solid wall, and metal retainers with installation gauge, and lips and ridges to control the direction of shrinkage and swelling of the wood boards to preserve the visual appeal of the wood siding. A wood grain pattern on the front surface of each siding board is a mirror image of a wood grain pattern on the front surface of another siding board.

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10

### **ABSTRACT OF THE DISCLOSURE**

15 The wood siding system has air circulation gaps between overlapping  
siding boards and between the siding boards and a supporting wall. The  
wood siding system has the appearance of old-fashion clapboards; a limited  
flexibility that closely imitates a solid wall, and metal retainers with  
installation gauge, and lips and ridges to control the direction of shrinkage  
20 and swelling of the wood boards to preserve the visual appeal of the wood  
siding. A wood grain pattern on the front surface of each siding board is  
a mirror image of a wood grain pattern on the front surface of another  
siding board.

25

**TITLE: OLD-FASHION CLAPBOARD-LIKE WOOD SIDING  
SYSTEM WITH VENTILATION GAPS**

This application claims the benefit of U. S. Provisional Patent Application  
5 No. 61/872,010, filed August 30, 2013.

**FIELD OF THE PRESENT INVENTION**

The present invention pertains to the field of wood siding for buildings, and  
10 more particularly, it pertains to a wood siding system that has a relatively  
thin overlap, and ventilation gaps around every board to prevent a retention  
of moisture behind the wood siding boards.

**BACKGROUND OF THE PRESENT INVENTION**

15

An old-fashion wood clapboard is approximately 1/4 inch thick at the lower  
edge tapering to a very thin top edge. Old-fashion wood clapboards were  
made to match the exposed surface and thickness of traditional cedar  
shingles. Wood clapboards were easier to install and to paint than  
20 shingles, and therefore this type of wall cladding became very popular  
during the last century.

Old-fashion clapboard-like siding is coming back in style with speciality  
wood products that are available at the present time. Wood siding products  
25 are being manufactured with stained or pre-painted wood boards, and with  
other torrefied or pressure treated wood products.

Experience gained with old-fashion clapboards, however, has dictated a  
number of improvements to be applied to the newer siding products. A

first improvement is to install the wood boards without nail to avoid cracking the boards along the thin edges of the boards. A second improvement is to provide ventilation between the siding boards and the supporting structure to prevent the absorption of moisture into and behind the boards. Such moisture is known to cause expansion of the boards, wood decay and discolouration and blistering of the painted surfaces of the boards.

A search in the prior art has not given any suggestion for a contemporary wood siding system including all the desired improvements, while maintaining the appearance of old-fashion clapboards. As examples, the following documents describe the various siding systems that have been found in the prior art.

15 US Patent 2,276,170, issued to A. Elmendorf on March 10, 1942;  
US Patent 2,292,984, issued to A. Alvarez, Jr., on August 11, 1942;  
US Patent 2,308,129, issued to S.H. Tummins on January 12, 1943;  
US Patent 2,354,639, issued to H.T. Seymour on July 25, 1944;  
US Patent 2,928,143, issued to L.J. Newton on March 15, 1960;  
20 US Patent 3, 015,193, issued to J. Amoruso on January 2, 1962;  
US Patent 3,173,229, issued to E. Weber on March 16, 1965;  
US Patent 3,237,360, issued to T.W. Mills on March 1, 1966;  
US Patent 3,261,136, issued to T.L. Abner et al., on July 19, 1966;  
US Patent 3,866,378, issued to G. Kessler on February 18, 1975;  
25 US Patent 4,117,644, issued to R.N. Weinar on October 3, 1978;  
US Patent 4,281,494, issued to R.N. Weinar on August 4, 1981;  
US Patent 5,501,050, issued to R. Ruel on March 26, 1996;  
US Patent 5,564,245, issued to R.J. Rademacher on October 15, 1996;  
US Patent 6,055,787, issued to M. Gerhafer et al., on May 2, 2000;

- US Patent 6,298,626, issued to E.P. Rudden on October 9, 2001;  
US Patent 6,843,032, issued to S. Hikai on January 18, 2005;  
US Patent 7,748,188, issued to T. Ito on July 6, 2010;  
US Patent 7,797,902, issued to S. Hikai et al., on September 21, 2010;  
5 US Publication 2002/0046536, by R. Hotta, dated April 25, 2002;  
US Publication 2009/0241459, by B. Bryan, dated October 1, 2009;  
US Publication 2010/0263316, by L. Bruneau, dated October 21, 2010;  
CA Patent 1,283,522, issued to K. Kelly on April 30, 1991;  
CA Patent 2,167,097, issued to R. Ruel on December 14, 1999;  
10 CA Patent Application 2,290,914, by M. Watanabe on May 30, 2005;  
CA Patent Application 2,649,123, by J. Koessler et al., on July 21, 2009;  
CA Patent Application 2,663,469, by L. Bruneau on October 21, 2010.

In view of these documents, it is believed that there remains a market  
15 demand in the field of wood siding industry for a wall siding system that  
has the appearance and stiffness of old-fashion clapboards; which can be  
installed without nails through the boards, and which has aeration gaps  
between and behind the siding boards. More particularly, there is a market  
demand for a wall siding system that retains its appearance of high-quality  
20 old-fashion wood siding despite expansion or shrinkage.

### **SUMMARY OF THE PRESENT INVENTION**

In the present invention, there is provided a wood siding system that has  
25 air circulation gaps between overlapping siding boards and between the  
siding boards and the supporting wall. The wood siding system has the  
appearance of old-fashion clapboards; a limited flexibility that closely  
imitates a solid wall, and means to control the direction of shrinkage of the  
boards to preserve the visual appeal of the wood siding.

In a first aspect of the present invention, there is provided a wood siding system comprising upper and lower wood siding boards mounted to a supporting wall. Each of the wood siding boards has a front surface, a back surface, an upper edge; a lower edge, and a tapered cross-section. The lower edge of each board has an apron strip and a shoulder. The apron strip of the upper wood siding board overlaps the upper edge of the lower wood siding board. The apron strip of the upper wood siding board is held at a distance for the front surface of the lower wood siding board such that a ventilation gap is maintained under the apron strip and above the front surface of the lower siding board.

The back surfaces of the wood siding boards are held parallel and in a same plane with each other and at a same distance from the supporting wall, such that a ventilation space is maintained behind the boards.

The shoulder of the upper wood siding board is held at a distance from the upper edge of the lower wood siding board such that an air circulation gap is maintained between the upper wood siding board and the lower wood siding board. Because of these air circulation gaps, a good ventilation is maintained between and behind the wood siding boards, to keep the siding boards and the supporting structure dry.

Because the back surfaces of the siding boards are held parallel to the supporting wall, a relatively thin ventilation gap can be maintained such that the supporting wall provides a backing support to the siding boards for preventing excessive deflection in the siding boards. When a siding board is accidentally pushed inward, a slight deflection causes it to rest against the supporting wall, suggesting that the siding boards are part of a solid structure.

In another aspect of the present invention, a metal retainer is mounted between the upper and lower wood siding boards. This metal retainer has a gauge lip extending vertically and forming a spacing gauge between the shoulder of the upper siding board and the upper edge of the lower siding board for maintaining an ideal distance between the shoulder of the upper siding board and the upper edge of the lower siding board. Because of these metal retainers and gauge lips, the upper siding board is easily installed over the lower siding board, without the need for a measuring tool. The metal retainers are simply loosely placed and spaced apart along the upper edge of a first siding board and nailed to the supporting wall. The shoulder on the bottom edge of a next wood siding board is manually force-fitted down into the metal retainers, and the process is repeated for the next wood siding board.

In another aspect of the present invention, the gauge lip on each metal retainer has a sharp edge for penetrating the upper edge of the lower wood siding board during swelling of the lower wood siding board. The metal retainer also has a tight-fit ridge therein, extending along the shoulder of the upper wood siding board for retaining the shoulder into the metal retainer, during shrinking of the upper wood siding board.

In yet another aspect of the present invention, a wood grain pattern on the front surface of the upper wood siding board is a mirror image of a wood grain pattern on the front surface of the lower wood siding board.

This brief summary has been provided so that the nature of the invention may be understood quickly. A more complete understanding of the invention can be obtained by reference to the following description of the preferred embodiment thereof in connection with the attached drawings.

**BRIEF DESCRIPTION OF THE DRAWINGS**

5 **FIG. 1** is a partial perspective view of the siding system according to the preferred embodiment of the present invention, under construction;

**FIG. 2** is an end view of a wood board and a preferred separation thereof into two siding boards;

10 **FIG. 3** is a first end view of a metal retainer that is used in the wood siding system according to the preferred embodiment of the present invention;

15 **FIG. 4** is an end view of two siding boards in the wood siding system according to the preferred embodiment of the present invention;

**FIG. 5** is an enlarged view of the overlap between the two siding boards as shown in **FIG. 4**.

20 **FIG. 6** is a second, enlarged end view of the metal retainer illustrated in **FIGS. 1 , 3-5**;

25 **FIG. 7** is an assembly of three extrusions snappily engaged to each other for shipping, handling and for cutting to length therefrom, a plurality of metal retainers.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

The preferred embodiment of the wood siding system according to the present invention is described herein below with reference to the attached  
5 drawings.

Referring to **FIG. 1**, the overall arrangement of the preferred siding system is illustrated. The wood siding boards **20** have straight back surfaces **22** that are held in a coplanar arrangement with each other, parallel to the  
10 supporting structure **24**. The wood siding boards **20** are held to the supporting structure **24** by spaced-apart metal retainers **26**. The metal retainers **26** are preferably installed at intervals of 12 to 24 inches along the top edge of each wood siding board **20**. A continuous length of metal retainer **26** (not shown) can also be used to support the bottom edge **28** of  
15 the lowermost wood siding board **20** on a wall.

Each wood siding board **20** has a tapering front surface **30** with a thicker lower edge. The lower edge has a shoulder **32**, a slot **34** and an apron-like strip **36** formed thereon, on its front surface. The apron-like strip **36**  
20 herein after referred to as the apron strip **36** has the thickness of an old-fashion clapboard. This thickness is approximately 1/4 inch. The apron strip **36** of one siding board **20** overlaps the upper edge of a lower siding board **20**. The thickness of this overlap is the thickness of the apron strip **36** plus the thickness of an air circulation gap that is maintained under the  
25 apron strip **36**. This air circulation gap will be explained later. The vertical length of this overlap is a same distance or slightly more than the projection of the overlap; that is 1/4 inch plus the thickness of the air circulation gap.

The shoulder **32** has substantially a same thickness as the upper edge **38** of the siding board **20**, such that when the siding boards **20** are mounted on a supporting wall **24**, their back surfaces **22** are straight, coplanar and parallel to the supporting wall **24**.

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In order to further enhance the visual appearance of the preferred siding boards **20**, pairs of grain-matching siding boards **20** are sawn from a single wood board **40** as shown in **FIG. 2**. For example, a one inch thick by 5-1/2 inch wide board **40** can be profiled on a moulder and sawn by thin-kerf bandsaw along the saw line **42**. The saw line **42** corresponds to the front surfaces **30** of both siding boards **20**. It is believed that the aforesaid overall overlap projection **44** of about 5/16 inch or slightly more together with the board width of about 5-1/2 inch, give the appearance of old-fashion clapboard siding.

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The preferred method of sawing of siding boards **20** as illustrated in **FIG. 2** produces pairs of siding boards with one board having a wood grain pattern that is a mirror image of the other. These mirror images are especially apparent when the boards are made of pine, ash or oak wood species for examples. These mirror images are referred to herein as “matching wood grain patterns”, and such “matching wood grain patterns” carry an impression of a carefully selected base material for manufacturing the preferred siding boards **20**. “Matching wood grain patterns” technique is well known in the field of high quality cabinet making and furniture manufacturing. When applied to wood siding as explained above, this technique carries a similar attribute of quality craftsmanship.

15

Both boards in a pair of “matching wood grain pattern” boards follow each other closely in the manufacturing process and remain at close proximity

of each other in bundles of wood siding boards delivered to clients. It becomes relatively easy for a carpenter to find boards in a same pair and install them at close proximity from each other to obtain the aforesaid high quality craftsmanship appearance. It becomes relatively easy for a carpenter to install each board above, alongside, staggered or in alternate row from its “mirror image” match for example, to obtain a “signature” or “trademark” siding appearance.

Referring now to **FIG. 3**, the preferred metal retainer **26** will be described. The metal retainer **26** is preferably cut from a bar of extruded aluminium profile. Several bars can be used in their full lengths to retain the lower siding board **20** on a wall as mentioned before. Bars of extruded aluminium profile are cut to individual short pieces as desired, to obtain metal retainers **26** of shorter lengths. Metal retainers **26** of two inches long, spaced apart twelve to twenty four inches are considered appropriate for most applications. Slightly longer metal retainers **26**, say three inch length or more, may be used to support vertical joints in the siding boards.

Each metal retainer **26** has a H-like formation. This H-like formation is made of a pair of U-shaped cavities **50, 52** superimposed over one another with the bottom one **52** being oriented downward. Both U-shaped cavities **50, 52** have a same opening width. These U-shaped cavities **50, 52** are made to enclose the shoulder **32** and the upper edge **38**, respectively, of overlapping wood siding boards **20**.

Each metal retainer **26** has a backing structure **58** which is made of two superimposed C-shaped formations **60, 62**. The top C-shaped formation **60** extends above the upper U-shaped cavity **50**. The top C-shaped formation **60** faces forward and has a nail-guiding groove **64** therein. The top C-

shaped formation **60** has sufficient depth to conceal the heads of nails that are used to fasten the metal retainer **26** to a wall **24**.

5 The purpose of both C-shaped formations **60**, **62** is to provide a backing structure **58** that has stiffening ribs and a sufficient thickness "A". The thickness "A" is preferably about 1/8 inch. The thickness "A" of the metal retainer's backing wall **58** constitutes the thickness of the air circulation gap **68** between the siding boards **20** and the supporting wall **24**.

10 The common front wall **54** of both U-shaped cavities **50**, **52** is a planar wall with a thickness "B" of about 1/16 of an inch or slightly less. In use, the upper half of this front wall **54** is nested in the aforesaid slot **34**, and the lower half of this front wall **54** constitutes a spacer to form an air circulation gap **56** between the apron strip **36** of one siding board **20** and  
15 the front surface **30** of the siding board **20** underneath. It will be appreciated that the air circulation gap **56** mentioned above extends between the metal retainers **26**. The thickness of the front wall **54** is preferably kept at 1/16 inch or slightly less such that the total projection of the overlap **44** does not exceed about 5/16 inch, and such that the  
20 appearance of old-fashion clapboard siding is maintained.

The function of the upper portion of the front wall **54** and the associated slot **34** in which this portion is fitted, is to retain the lower shoulder **32** of the upper wood siding board to the supporting wall **24**. The function of the  
25 lower portion of the front wall **54** is to retain the upper edge **38** of the lower siding board to the supporting wall **24**.

The advantage of this installation is that the air gap **68** between the siding boards **20** and the supporting wall **24** can be maintained to a very small

distance to prevent excessive or uneven deflection in the siding boards **20**, should they be accidentally pushed against the supporting wall **24**.

Referring again to **FIG. 3**, the lower U-shaped cavity **52** has a gauge lip **66**  
5 formed on the bottom thereof. This gauge lip **66** is used as a spacing gauge to obtain a proper spacing between the shoulder **32** of one siding board **20** and the top edge **38** of the siding board **20** below it. When a wall is being covered with wood siding boards **20**, the metal retainers **26** are loosely placed on the top edge **38** of the last-installed siding board **20**, and it is  
10 nailed to the supporting wall **24** without measurement.

The gauge lip **66** ensures that a proper air circulation spacing **70** is maintained between rows of siding boards **20** to allow for swelling of the boards in high humidity conditions for example. This vertical air  
15 circulation gap **70** between siding boards **20** also constitutes an air passage communicating with the air circulation gap **56** and the vertical gap **68**.

The gauge lip **66** has a depth “**C**” that is a function of the total board width, and the potential swelling of each siding board **20**. The gauge lip **66** has a  
20 relatively sharp lower edge for penetrating the upper edge **38** of a siding board **20** with ease, during swelling of that siding board **20**, without splitting the upper edge **38** of that board.

Referring now to **FIGS. 4** and **5**, the air circulation gaps between and  
25 behind the siding boards **20** will be explained. Because the back surfaces **22** are held in a coplanar arrangement parallel to the supporting wall **24** at a very small distance from the supporting wall surface **24**, an effective ventilation (without air flow resistance) of the siding boards **20** is achieved. The arrow **72** in **FIG. 5**, illustrates the air flow pattern through the air

circulation gap **56**, through the board spacing **70** and along the vertical air circulation gap **68** along the supporting wall **24**.

Also because the back surfaces **22** are held in a coplanar arrangement, parallel to the supporting wall **24**, at a very small distance from the supporting wall surface **24**, an effective backing support against excessive bending or twisting is obtained. When a siding board **20** is pushed inward toward the supporting wall **24**, it quickly touches the supporting wall **24** to prevent breaking or splitting of the siding board **20**.

10

Another feature that is provided to enhance the visual appearance of the present wood siding system, is that the apron strip **36** of each siding board **20** overlaps the front wall **54** of a metal retainer **26** by a distance “**D**” as illustrated in **FIG. 5**, of about 1/8 inch. Because of this overlap “**D**”, the metal retainers **26** are not visible at a glance when looking at a wall made with the wood siding system according to the preferred embodiment of the present invention.

15

Also for the purpose of maintaining a high quality appearance of the wood siding, a tight-fit ridge **80** is provided along the inside edge of the upper U-shaped cavity **50**. The purpose of this ridge **80** is to create a tight fit in the U-shaped cavity **50** for receiving and retaining by friction force, the lower shoulder **32** of a board inside the cavity **50**. Because of these tight-fit ridges **80**, the bottom edges of all wood siding boards **20** are held down relative to the metal retainers **26** for concealing the metal retainers **26** from view even when there is some degree of shrinkage along the height of the wood siding boards **20**.

20  
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In another feature of the preferred metal retainers **26**, the front wall **54** thereof has a width 'F' that is a same dimension as the width inside the C-shaped formation **62**. As can be seen in **FIG. 6**, this C-shaped formation **62** has ridges **82** and **84** on respective edges thereof, for snappily receiving and retaining the front wall **54** of another metal retainer **26** inside the C-shaped formation **62**, substantially as illustrated in **FIG. 7**. Several extrusion profiles **86** can be assembled together as a bundle as shown in **FIG. 7**, to facilitate the handling and shipping of the extrusions to a client, or for handling the extrusion profiles in a cut-off saw when manufacturing metal retainers **26** of a same length.

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## CLAIMS

What is claimed is:

1. A wood siding system comprising upper and lower wood siding  
5 boards mounted to a supporting wall;  
each of said upper and lower wood siding boards having a front  
surface, a back surface, an upper edge; a lower edge, and a  
tapered cross-section; said lower edge having an apron strip  
and a shoulder thereon;  
10 said apron strip of said upper wood siding board overlapping said  
upper edge of said lower wood siding board, and said apron  
strip of said upper wood siding board being held at a distance  
for said front surface of said lower wood siding board;  
said back surfaces of said upper and lower wood siding board being  
15 held parallel and in a coplanar arrangement with each other  
and at a same distance from said supporting wall; and  
said shoulder of said upper wood siding board being held at a  
distance from said upper edge of said lower wood siding  
board; such that an air circulation gap is maintained between  
20 said upper and lower wood siding boards and between said  
upper and lower wood siding boards and said supporting  
wall.
2. The wood siding system as claimed in **claim 1**, also comprising a  
25 metal retainer mounted to said supporting wall between said upper  
and lower wood siding boards, said metal retainer having a spacing  
gauge lip thereon extending between said shoulder of said upper  
wood siding board and said upper edge of said lower wood siding  
board for maintaining an even mounting distance between said

shoulder of said upper wood siding board and said upper edge of said lower wood siding board.

- 5           3.     The wood siding system as claimed in **claim 2**, wherein said metal  
retainer has a front wall, and said lower edge of said upper wood  
siding board has a vertical slot therein between said apron strip and  
said shoulder, and a portion of said front wall of said metal retainer  
extend in said vertical slot.
- 10          4.     The wood siding system as claimed in **claim 2**, wherein said gauge  
lip has a sharp lower edge for penetrating said upper edge of said  
lower wood siding board during swelling of said lower wood siding  
board.
- 15          5.     The wood siding system as claimed in **claim 2**, wherein said metal  
retainer also has a tight-fit ridge therein, extending along said  
shoulder of said upper wood siding board for retaining by friction  
force said shoulder of said upper wood siding board into said metal  
retainer.
- 20
6.     The wood siding system as claimed in **claim 5**, wherein a wood  
grain pattern on said front surface of said upper wood siding board  
is a mirror image of a wood grain pattern on said front surface of  
said lower wood siding board.
- 25
7.     The wood siding system as claimed in **claim 5**, wherein a thickness  
of said apron strip is 1/4 inch.

8. The wood siding system as claimed in **claim 5**, wherein a spacing of said back surface from said supporting wall is 1/8 inch.
9. The wood siding system as claimed in **claim 3**, wherein said metal  
5 retainer has a backing structure comprising two C-shaped formations, respectively facing toward opposite directions.
10. The wood siding system as claimed in **claim 9**, wherein one of said C-shaped formations has a nail-guiding groove therein.
- 10
11. The wood siding system as claimed in **claim 9**, comprising a plurality of said metal retainers and wherein said front walls on said metal retainers have a same width as a dimension inside one of said C-shaped formations, so that said front wall of one of said metal  
15 retainers can be nested in said one of said C-shaped formations on another one of said metal retainers.
12. A wood siding system comprising upper and lower wood siding boards mounted to a supporting wall;  
20 each of said upper and lower wood siding boards having a front surface, a back surface, an upper edge; a lower edge, and a tapering cross-section; said lower edge having an apron strip and a shoulder thereon; said apron strip of said upper wood siding board overlapping said upper edge of said lower wood  
25 siding board;  
air circulation gaps extending between said apron strip of said upper siding board and said front surface of said lower siding board; between said lower edge of said upper wood siding board and said upper edge of said lower wood siding board,

and between said back surfaces of said upper and lower wood siding boards and said supporting wall;  
said front surface of said upper wood siding board having a first wood grain pattern thereon,  
5 said front surface of said lower wood siding board having a second wood grain pattern thereon, and  
said first wood grain pattern being a mirror image of said second wood grain pattern.

10 **13.** The wood siding system as claimed in **claim 12**, also comprising a metal retainer mounted to said supporting wall between said upper and lower wood siding boards ; said metal retainer having a spacing gauge lip thereon extending between said shoulder of said upper wood siding board and said upper edge of said lower wood siding  
15 board for maintaining an even mounting distance between said shoulder of said upper wood siding board and said upper edge of said lower wood siding board.

20 **14.** The wood siding system as claimed in **claim 13**, wherein said metal retainer has a front wall, and said lower edge of said upper wood siding board has a vertical slot therein between said apron strip and said shoulder, and a portion of said front wall of said metal retainer extends in said vertical slot for retaining said lower edge of said upper siding board to said supporting wall.

25 **15.** A wood siding system comprising an upper wood siding board and a lower wood siding board mounted to a supporting wall;  
each of said upper and lower wood siding boards having a front surface, a back surface, an upper edge; a lower edge, and a

tapered cross-section; said lower edge having an apron strip, a shoulder and a vertical slot between said shoulder and said apron strip;

5 said apron strip of said upper wood siding board overlapping said upper edge of said lower wood siding boards; said apron strip of said upper wood siding board being held at a distance from said front surface of said lower wood siding board;

10 said back surfaces of said upper wood siding board and said lower siding board being held parallel and in a coplanar arrangement with each other and at a same distance from said supporting wall; and

15 a plurality of metal retainers mounted to said supporting wall between said upper wood siding board and said lower wood siding board, each of said metal retainers having a thickness measured from said supporting wall, and a front wall extending between said apron of said upper wood siding board and said front surface of said lower wood siding board; a portion of said front wall extending in said vertical slot; and a spacing gauge lip thereon extending between said

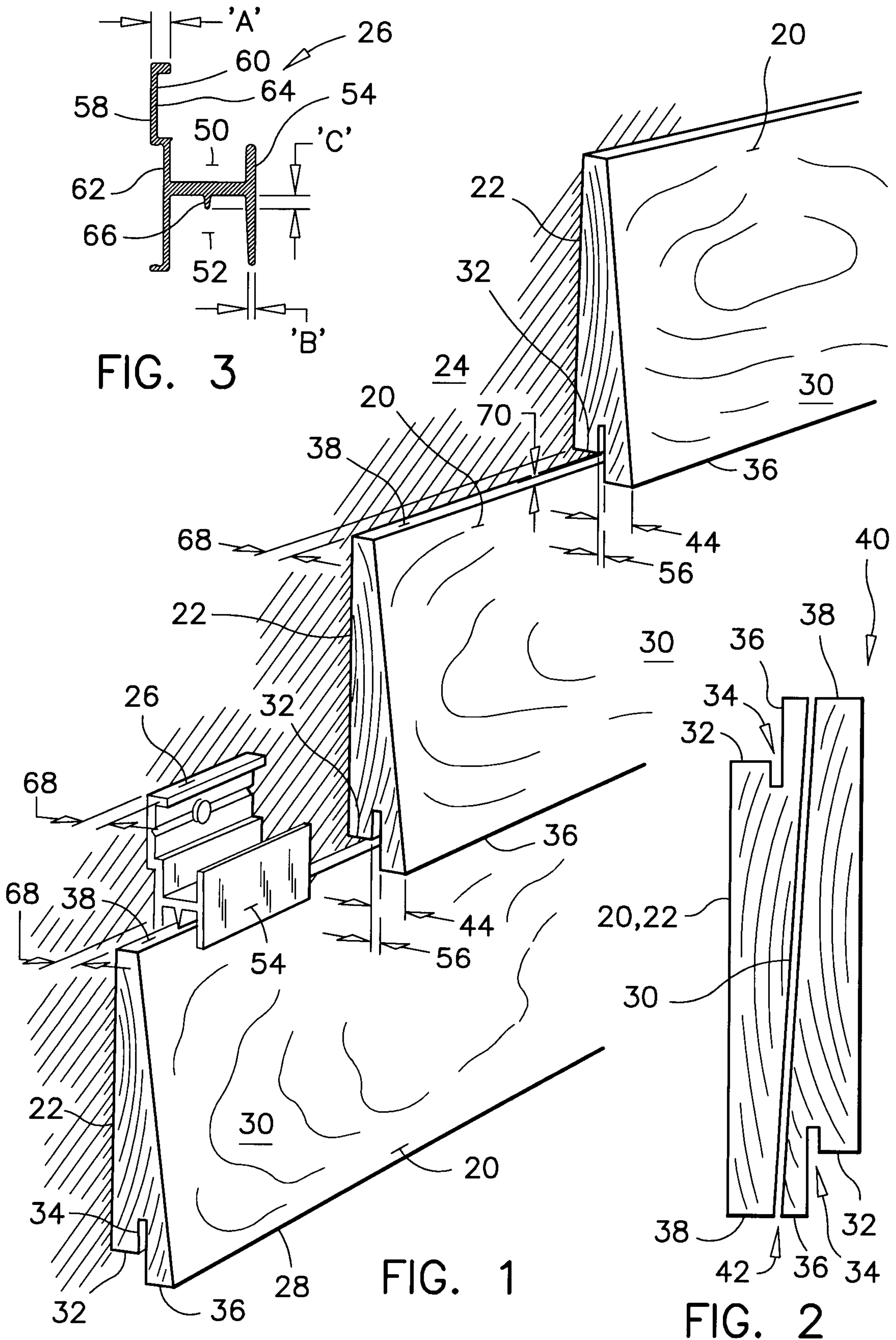
20 shoulder of said upper wood siding board and said upper edge of said lower wood siding board for maintaining an even mounting distance between said shoulder of said upper wood siding board and said upper edge of said lower wood siding board; such that air circulation gaps are maintained

25 between said upper wood siding board and said lower wood siding board and between said upper and lower wood siding boards and said supporting wall;

said metal retainer also has a tight-fit ridge thereon, extending along said shoulder of said upper wood siding board for retaining

said shoulder in said metal retainer during a shrinking of said upper wood siding board.

- 5
16. The wood siding system as claimed in **claim 15**, wherein a wood grain pattern on said front surface of said upper wood siding board is a mirror image of a wood grain pattern on said front surface of said lower wood siding board.
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17. The wood siding system as claimed in **claim 15**, wherein said backing structure comprising two C-shaped formations, respectively facing in opposite directions and one of said C-shaped formations has a nail-guiding groove therein.
- 15
18. The wood siding system as claimed in **claim 15**, comprising a plurality of said metal retainers and wherein said front wall on each of said metal retainers has a same width as a dimension inside one of said C-shaped formations, so that said front wall of one of said metal retainers can be nested in said one of said C-shaped formations on another one of said metal retainers.
- 20
19. The wood siding board as claimed in **claim 15**, wherein said spacing gauge lip has a sharp lower edge for penetrating said upper edge of said lower wood siding board during swelling of said lower wood siding board.
- 25
20. The wood siding system as claimed in **claim 15**, wherein a thickness of said apron strip is 1/4 inch.



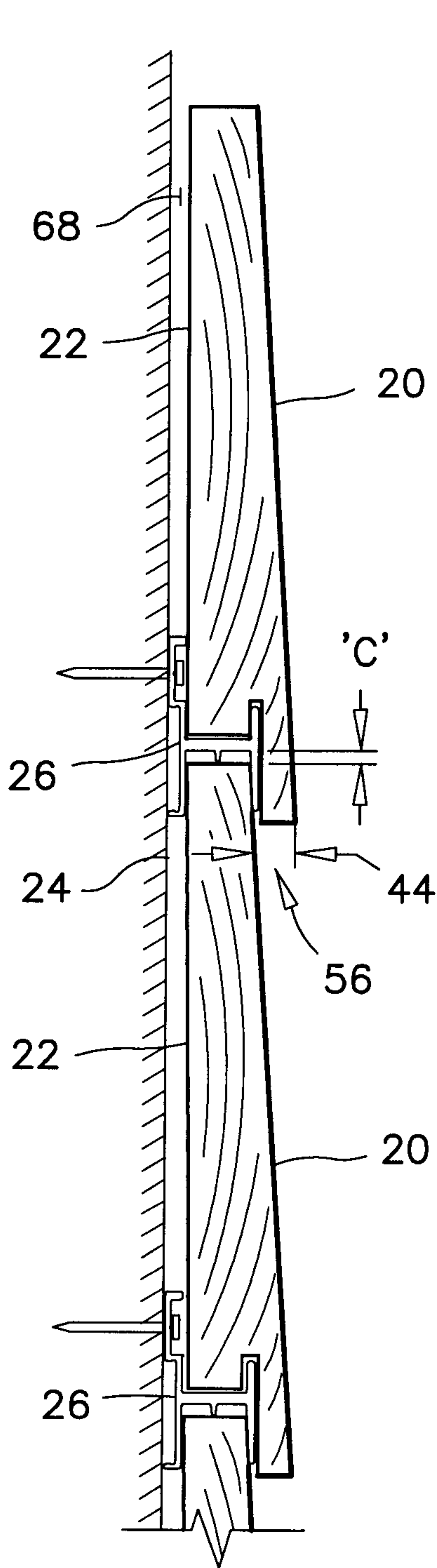


FIG. 4

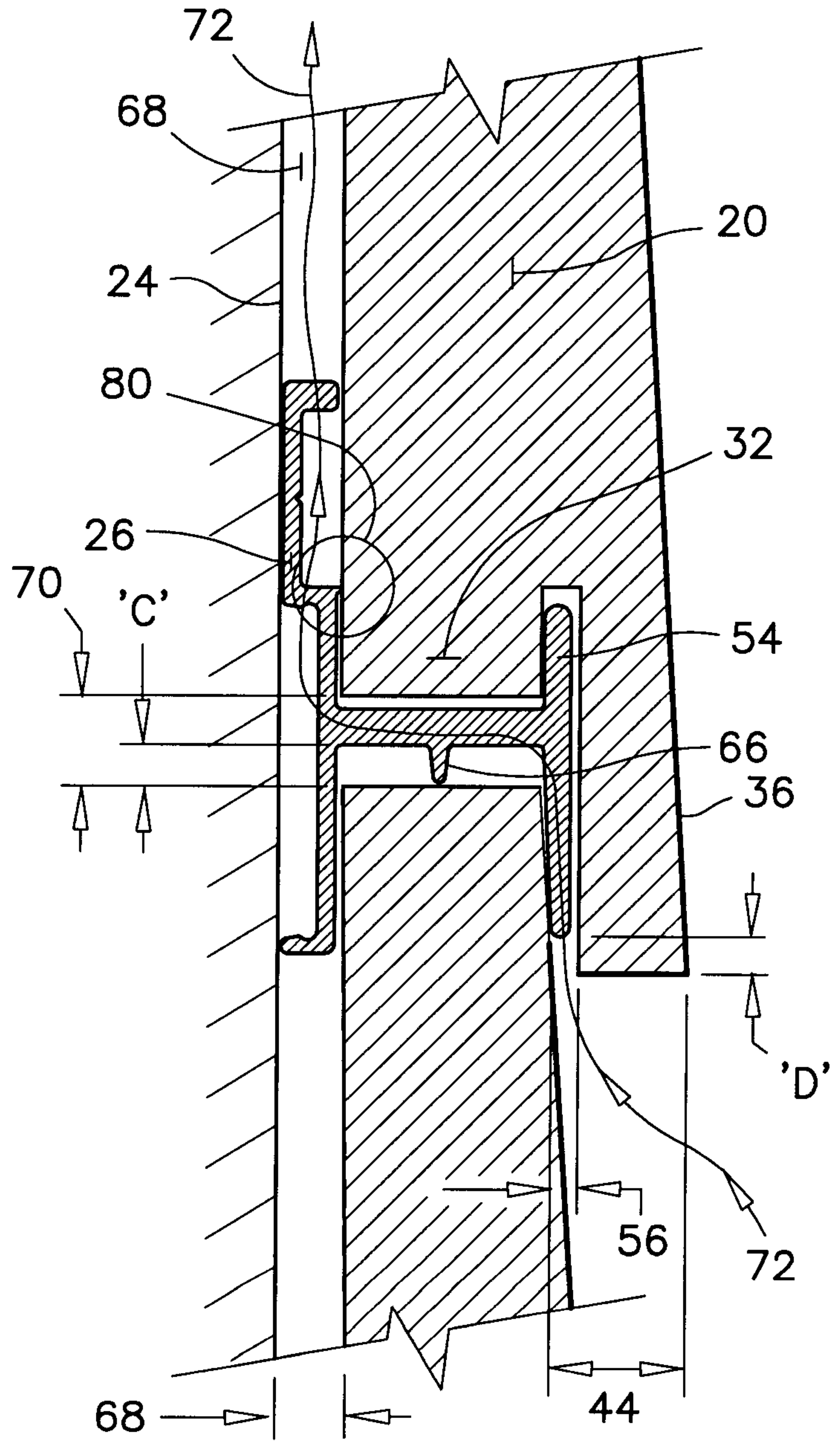


FIG. 5

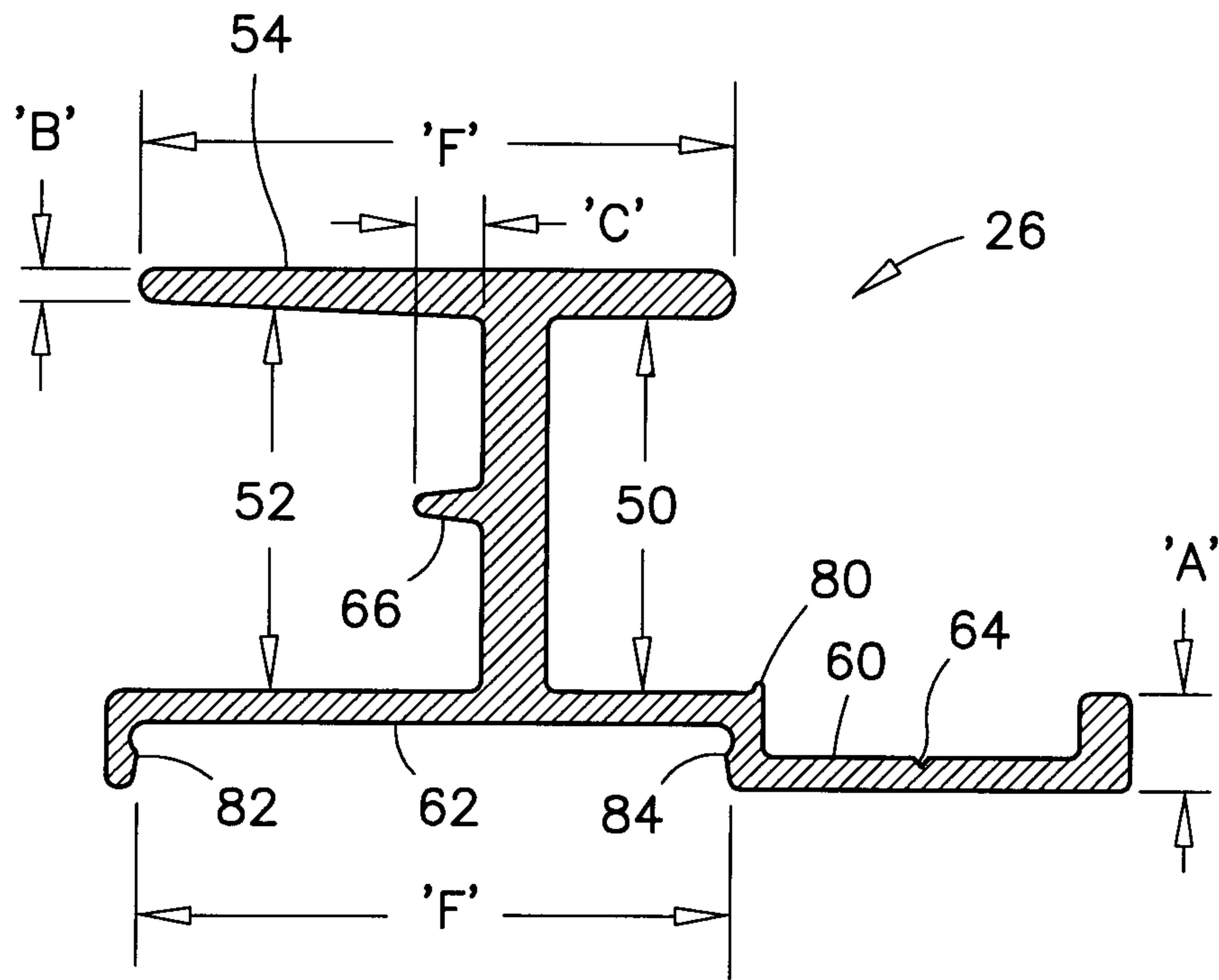


FIG. 6

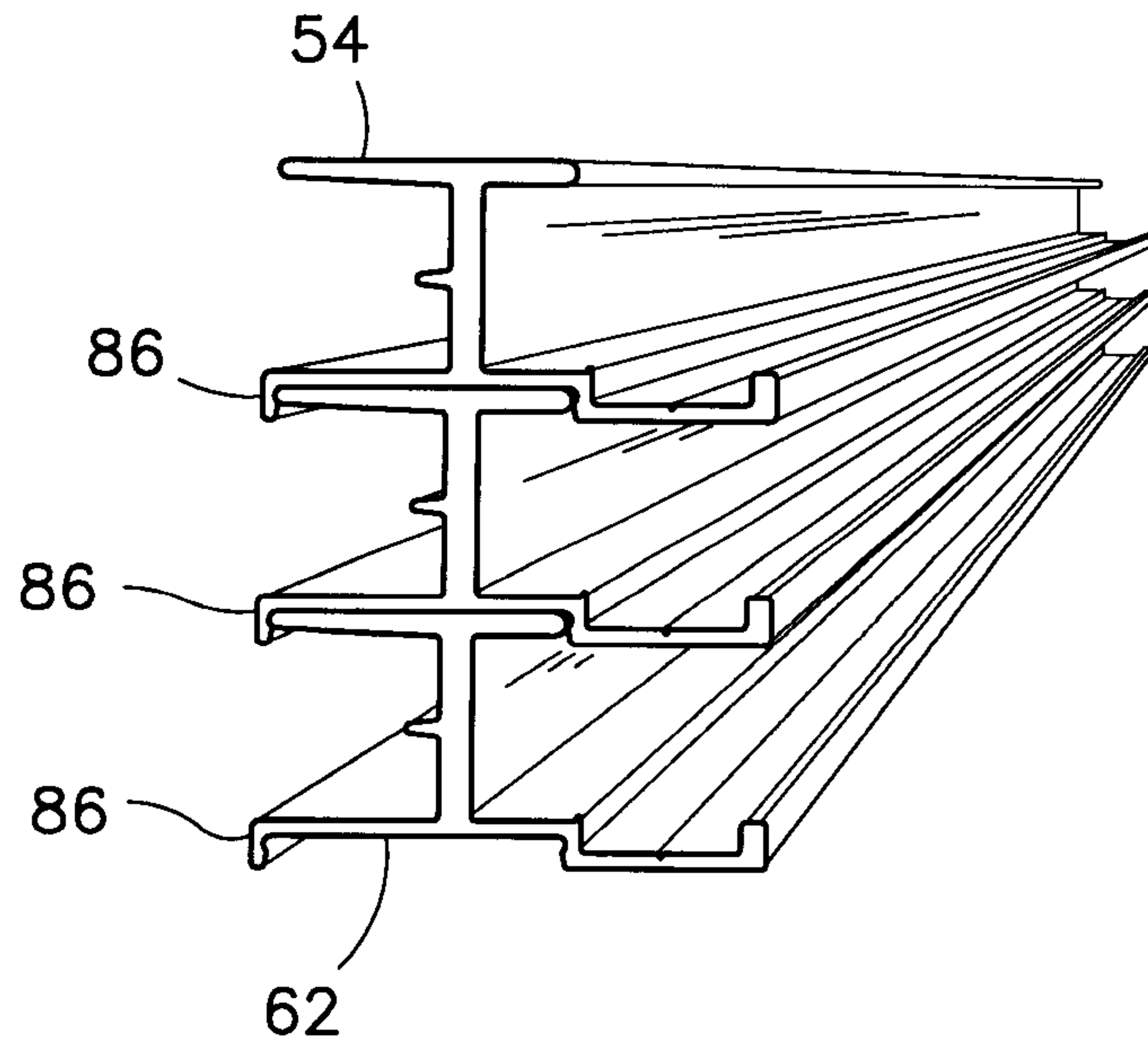


FIG. 7

